UNIVERSITY of HOUSTON

THE INSTITUTE FOR RESEARCH ON WOMEN, GENDER & SEXUALITY

IRWGS Pandemic Snapshot #12 – October 7, 2022

Update on Houston/Harris County Covid19 Fatalities by Sex, Race/Ethnicity & Age[1]

Based on deaths certified as of August 31, 2022.

Since our Snapshot #11 on data through April 2022, **an additional 601** Covid19 deaths have been confirmed in Houston/Harris County. **169** are deaths that *occurred since* the last report, between April 1st and August 31st (156 reported by the Houston Health Dept, 13 by Harris County Public Health); the other **432** are delayed reports of deaths that *occurred earlier* (62 through HHD; 370 through HCPH). This brings our region's certified deaths to **8,402—3,434 women 4,962 men—40.9% Female /59.1% Male (6 sex unknown)**. The confirmation process lags, undercounting deaths to date, especially recent deaths.

The state of **Texas reports 11,323** Harris County Covid19 deaths as of 10/7/22 but provides no demographics.[2] The smaller confirmed **dataset used here includes demographics.** which can assist policy analysis. In H/HC, **gender, race/ethnicity & age differentials in Covid19 mortality numbers and rates have been significant**. Figure 1 provides H/HC Covid19 mortality rates to date by gender and race/ethnicity.[3]

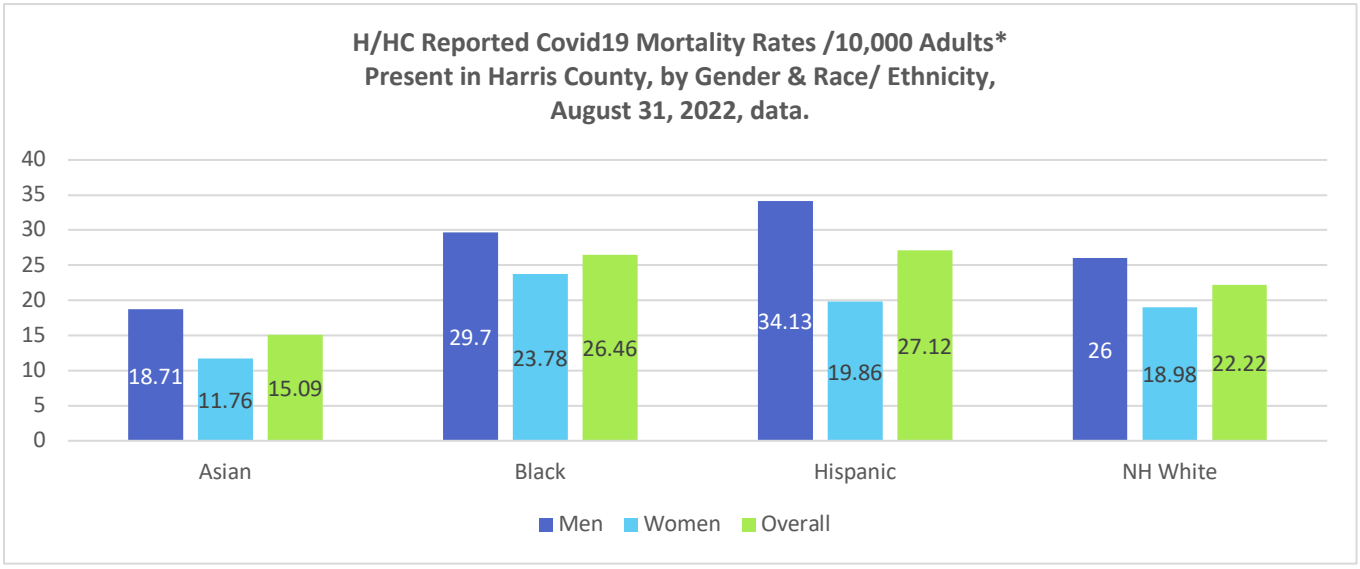

Figure 1 *Adults = 20 and over in the Harris County population (per 2019 ACS[4]). Mortality Data per HHD & HCPH, as of August 31, 2022.

With **89,629 Texans reported dead due to Covid19** so far, and more than a million US deaths overall,[5] Covid19 fatalities continue, and Long-Covid19 looms for many. But infections are down and a new booster is available.[6]

A recent report[7] found that if **had there been full insurance coverage of the US population**, there would have been **26% fewer COVID-related deaths** nationally (they studied Jan 2020 to Feb 2021 and assumed an

[1] This Snapshot uses current Covid19 death data based on Houston and Harris County Health Departments' death certificate data (agency per decedent's residence). **This is provisional, dynamic data**. Gender/Sex & Race/Ethnicity as reported may not reflect preferred identities. HHD & HCPH deaths are confirmed as of 8/31/2022; the most recent in this set occurred on August 22nd.

[2] Texas Dept. of State Health Services dashboard: accessed 10/7/2022. Of them, 1,505 occurred in 2022, 6,092 in 2021, 3,726 in 2020.

[3] These rates are based on confirmed deaths to date compared to the adult population breakdown of Harris County, per the 2019 ACS from the US Census Bureau. Adults only because there have been few deaths in the population under 19 here (16).

[4] 2019 data is utilized because 2020 ACS data was compromised by Covid. We will update using 2021 data when available.

[5] As of 10/6/2022, Texas fatalities per DSHS; CDC reports 1,056,029; US Covid19 deaths; World meter reports 1,087,069 US deaths.

[6] HC = 64.4% fully vaxed; 75.1% one dose+. (HC/H Covid19 Data Hub). HC test positivity rate: 12.2% (UTSPH) [10/6/22].

[7] Campbell, T. et al., 2022. "Exacerbation of COVID-19 mortality by the fragmented United States healthcare system: A retrospective observational study," *The Lancet* (12 May 2022): online.

average 11% uninsured rate). They found that groups with lower health insurance coverage had significantly higher deaths, case counts, and hospitalization.

This finding is particularly salient for Texas, the **state with the lowest insurance rate (with 16.7% uninsured in 2021).** Though we can't apply the 26% fewer deaths statistic directly to the Texas case since expanding Medicaid would not have fully covered everyone in the state, the additional 5.7% uninsured here above the assumed 11% would have narrowed any gap, so 26% provides a ballpark sense.

At 26%, of the 89,303 Covid19 deaths in Texas overall, 23,719 would have been prevented. And of the 11,323 Covid19 deaths to date in Harris County, 2,944 would have been prevented. While we can't cite those specific numbers with assurance, we do know that many fewer Texans would have been uninsured had Medicaid been expanded here, many underlying conditions would have been prevented, and **many thousands of deaths would not have occurred**.

Hispanic men have borne the brunt of Covid19 losses here, both in absolute numbers and in relative mortality rates, and there are additional disparities evidenced across multiple identity factors, especially affecting Black men and Black women, as well as all men relative to women in their R/E groups and overall. Figure 2 presents specific numbers of confirmed H/HC Covid19 deaths by gender, race/ethnicity and age.

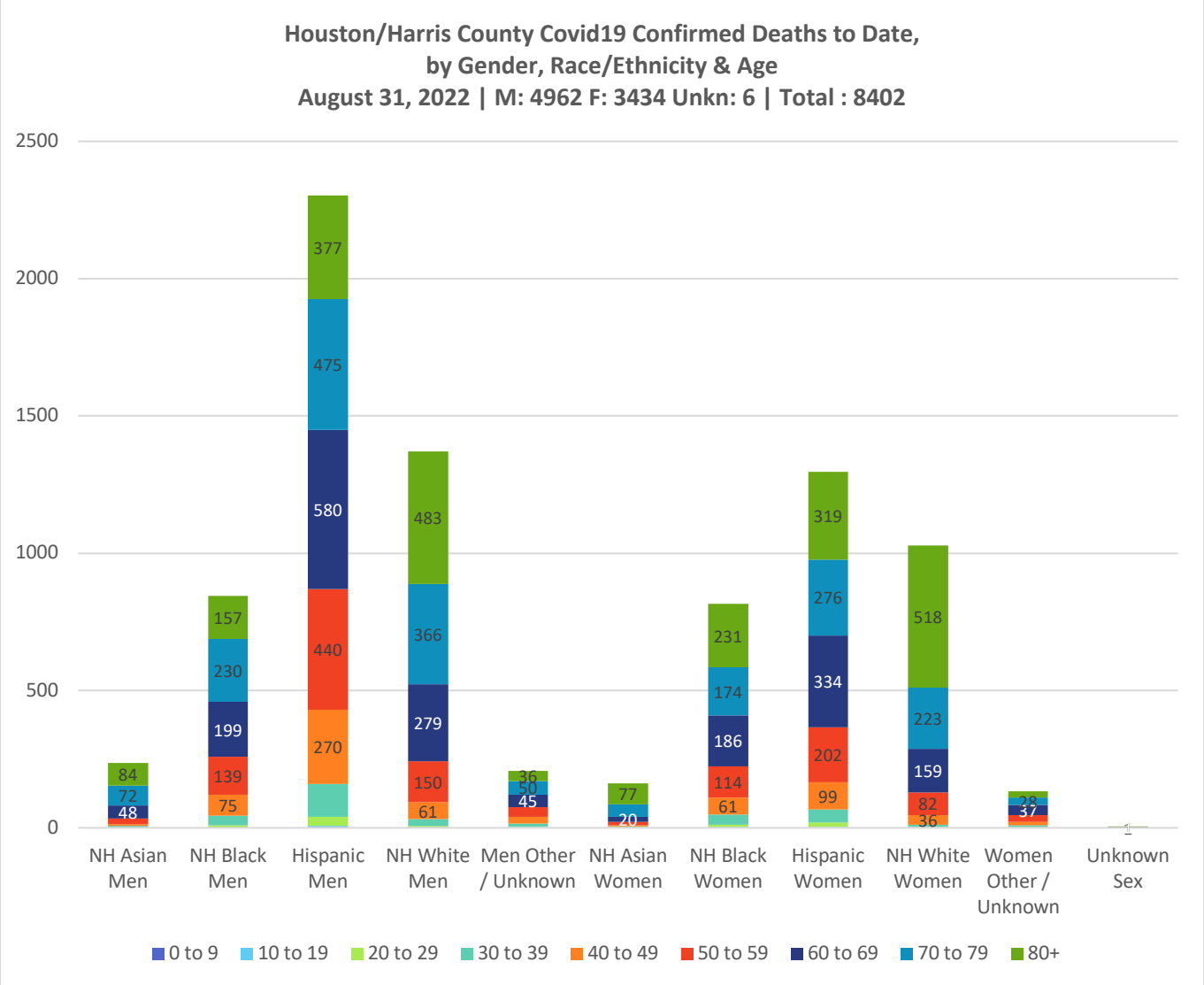

Figure 2 HHD – 4680 | HCPH – 3722 Mortality Data per HHD & HCPH, as of August 31, 2022.

As of August 31, 2022, confirmed deaths by race/ethnicity included: Asian **400** (237male; 162female; 1unknown); Black **1660** (845m; 815f); Hispanic **3599** (2302m; 1296f; 1unkn); NH White **2402** (1371m; 1029f; 2unkn); Other/Unknown **341** (207m; 132f; 2unkn).
Older people are most susceptible, but others may also die. Only **4.42% did not have an underlying condition**[8] that increased their risk for death by Covid19 (these include age, obesity,[9] diabetes, respiratory illnesses, dementia, heart conditions and other ailments). The divisions revealed here in health outcomes along lines of race/ethnicity (often linked to income-status/class) indicate the need for a more equitable state and national health system.

The **adult population of Houston/Harris County (20+)** breaks out by Gender & Race/Ethnicity as thus:
Male: 7.9% NH Asian; 17.6% NH Black; 41.8% Hispanic; 32.7% NH White
Female: 8.2% NH Asian; 20.5% NH Black; 38.9% Hispanic; 32.4% NH White (ACS 2019)
Though the documentation of infections does not reliably report race/ethnicity[10] (so we cannot track infection equity or correlate infection with death rates here), death certificates do. (However, HCPH lists race/ethnicity as Unknown, Other or Multiracial at 42 times the rate that HHD does [**8.83% HCPH** (81 Other/Multiracial + 248 Unknown) vs **0.21% COH** (5 listed as Arab, Pacific Islander, American Indian/Alaska Native + 5 Unknown), as of 8/31/22]. Designations as Unknown Race were found by a *Washington Post* Special Report to more often involve people of color than whites.)

Effects Over Time
Figure 3 charts Covid19 deaths each month by race/ethnicity and gender, indicating the waves, with their disproportionate effects. The death toll was reduced in the Delta wave from the higher toll in previous waves by the uptake of vaccines, demonstrating both vaccine effectiveness and the effects of the prior waves, which have already wiped out some of the most vulnerable. The disproportion was still present but reduced in the later waves. Since many Covid19 fatalities occur among un-vaxed members of the community,[11] direct outreach to overcome hesitancy and other barriers continues important to controlling the pandemic going forward.

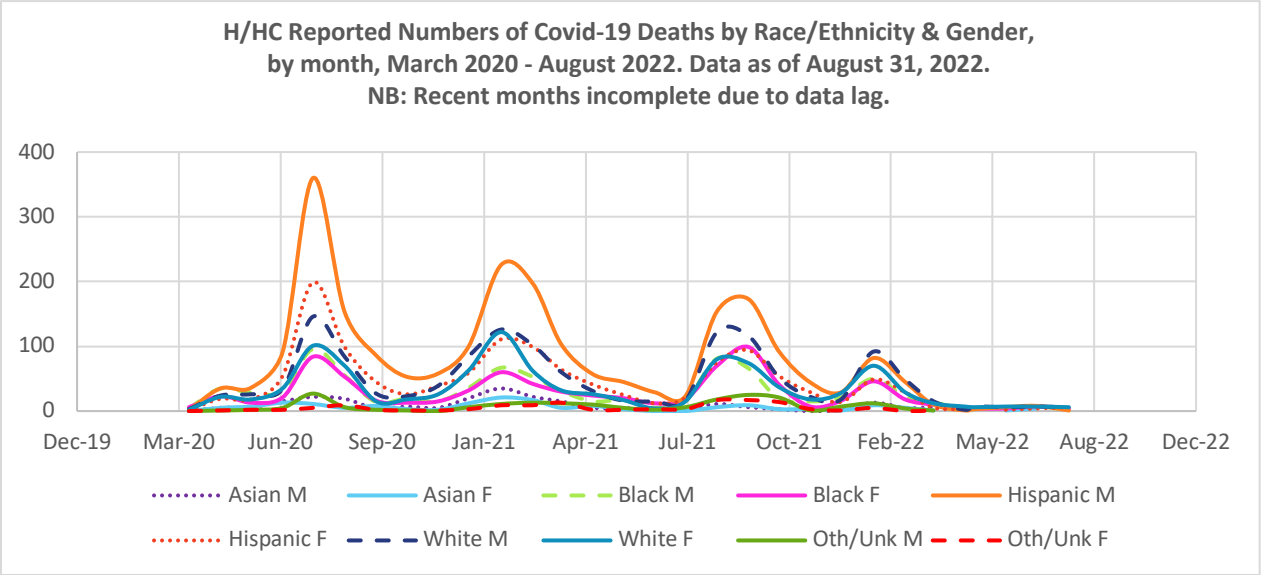

Figure 3 Mortality Data per HHD & HCPH, as of August 31, 2022.

[8] "No underlying condition" includes both those listed as No and Undetermined. The rest were marked Yes on their certificates.
[9] Even mild overweight can be a risk factor. Roni C. Rabin, "Extra Pounds May Raise Risk of Severe Covid," *NY Times* (10/10/2020).
[10] Per the Houston/Harris County Covid19 Dashboard, 117,000 out of the total 212,686 cases (more than half) reported as of December 17, 2020, were "Race Unknown." Since then, the revised dashboard reports only weekly data, broken out by race/ethnicity "where known," but there is no account of what proportion of cases that is.
[11] As of Sept. 2022 per DSHS, unvaccinated Texans were 11 times more likely to test positive for Covid and 28 times more likely to die of Covid19 than vaccinated. Death certificate data does not include vaccination status.

GENDER ANALYSES

Figure 4 charts Houston/Harris County Covid19 deaths over months by gender and overall. To date, men here have been dying at a rate nearly 50% higher than women (roughly 60% of deaths have been to men and 40% to women since the start of the pandemic)**.**[12] This parallels the global pattern of more male deaths, though testing shows an infection rate of roughly 50/50.[13] The global difference is likely due to a combination of biological and behavioral factors, **with behaviors that lead men to be in worse health than women generally more influential**.[14]

Either way, men are much more likely than women to become severely ill and to die of the virus, and should be especially careful to avoid infection—via vaccination, masking and social distancing. People of all genders/ sexes with such co-morbidities as *obesity, diabetes, heart disease, and respiratory ailments* are at greater risk than others.

The **gender difference varies slightly between the two local health departments**. The **City of Houston** Health Department's confirmed **4,680 deaths** as of August 31, 2022, were **2,816 male / 1,864 female—60.2%m/39.8%f**. But **Harris County** Health Department's confirmed **3,722 deaths** in the unincorporated sectors of Harris County as of August 31, 2022, were **2,146 male, 1,570 female—57.7%m/42.2%f (& 6 sex unknown)**.

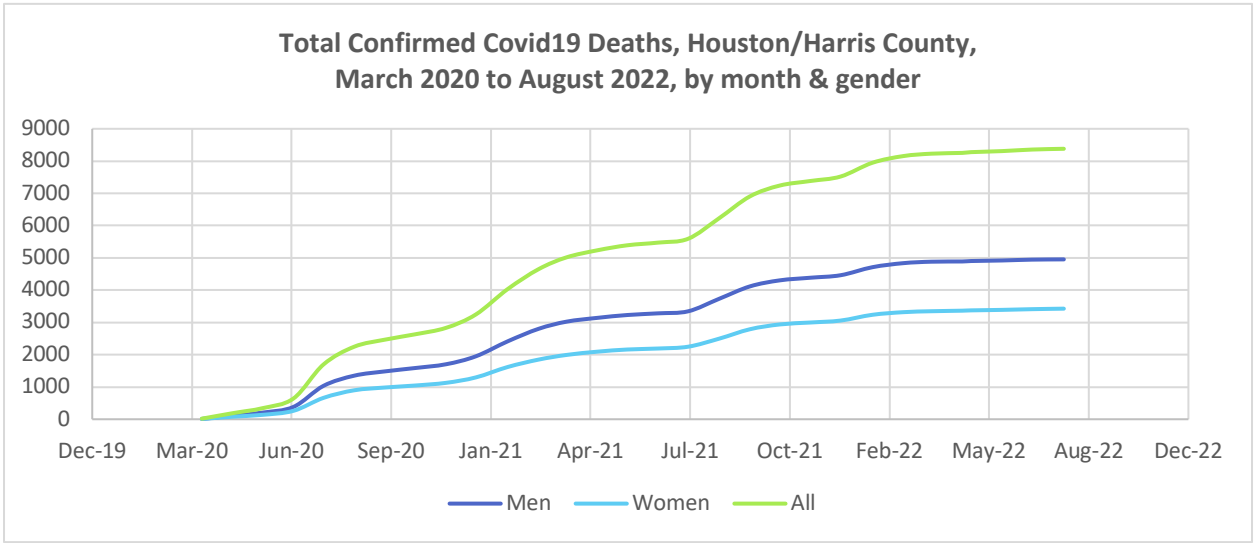

Figure 4 Mortality Data per HHD & HCPH, as of August 31, 2022.

There is **a notable difference in the gender variation within racial/ethnic groups** here (see Figure 1): among those whose Covid19 deaths have certified in H/HC, **Hispanic Men** have a mortality rate **42.2% higher than Hispanic women**; **Asian men** a rate **37.7% higher than Asian women**; **White men** a rate **27% higher than White women; and Black men** a rate **20% higher than Black women**. These gaps may be linked to men being

[12] This is a wider gap than the CDC's national data indicate, which is 55% male / 45% female (10/7/22).

[13] See, for instance, this study from UK Research and Innovation (April 2020).

[14] One study in Italy in Spring 2020 found men had 58% of Covid19 infections & 70% of Covid19 deaths, while Wuhan China saw most infections (between 51.0 and 66.7%) among men, with a 1:1.64 female/male ratio of deaths (*WJEM* 2020;21(3): 507-509). Respiratory infections SARS (2003) and MERS (2012) also saw sex-linked differentials. In the US, state death data around sex differentials vary widely, suggesting that behavioral reasons like **men's going to the doctor less, eating less healthy foods, and smoking more than women overall play the biggest rol**e (Harvard GenderSciLab). Some hormonal or genetic protection—from higher rates of estrogen/ progesterone or from the double X chromosome—may play in. Differential rates of exposure through work outside the home & differences in over health-affecting behaviors (mask wearing, handwashing, etc.) are also potential factors. Grace Huckins, "Covid19 Kills More Men Than Women. Experts Still Can't Explain Why," *Wired* (7.9.2020). A report in *Nature* (August 26, 2020), found that older men produce a weaker immune response to the virus than older women, but those findings have been disputed by the Harvard GenderSci Lab.

in some frontline jobs in greater numbers than women and/or to those men being in worse health than women and/or taking fewer health precautions, including fewer vaccines.

Long Covid/PASC Varies by Gender Too

New studies suggest that women are more likely to suffer with Long Covid Syndrome (aka PASC – Post-Acute Sequelae of Covid)–and to have more symptoms.[15] The American Academy of Physical Medicine and Rehabilitation dashboard reports that **30%** of those who have gotten and survived Covid19 to date have gone on to show signs of PASC (an estimated **29 million Americans**). Thirty percent means that **in Texas, with 6,358,000 confirmed cases, at least 1.9 million people may have long Covid**, and in **Harris County, 341,000**. In one Italian study in 2021, **women were 20% more likely than men to exhibit long Covid**. If you have symptoms and are interested in participating in research, enroll at RECOVERCovid.org (an NIH initiative). Much research to follow.

RACE/ETHNICITY ANALYSES

All the analyses indicate significant differences by race/ethnicity, intersectional with sex and age. Figure 1 (above) indicates that Hispanic men have died of Covid19 at a rate 31% higher than that of White men, almost double that of Asian men (82% higher), and 15% higher than that of Black men; while Black men have died at a rate 14% higher than White men and 59% higher than Asian men, per reports to date. In the Household Pulse Survey for Houston (through May 2022), Asian men and women reported a 97.23% vaccination rate, while other groups reported rates in the high 70s and low 80s.

Women in each race/ethnicity group have died at rates lower than the men in the same group, but women's rates also vary widely by race/ethnicity, and Black women have died at a rate almost equal to that of White men, and greater than that of Asian men, as well as all other groups of women.

Differences among race/ethnicity mortality rates are in part attributable to the combination of historical bias creating unequal access to health care and doctors treating people of color less aggressively. These dynamics have led to a higher incidence of underlying conditions among communities of color. In addition, those with higher rates of frontline employment and dense living situations have faced elevated infection rates.

Since Spring 2021, vaccine hesitancy has also affected infection and mortality rates, the patterns of which will emerge gradually.

Politics have been a factor. A recent NIH study found "substantially higher excess death rates for registered Republicans when compared to registered Democrats, with almost all of the difference concentrated in the period after vaccines were widely available."[16]

Along with contagion in frontline jobs, economic repercussions of the pandemic (including evictions) increased the likelihood that people would be packed into shared apartments with no room for sick people to isolate. Immigration fears also impact the Hispanic community as well as other immigrant communities here,

[15] See Pela et al. "Sex-Related Differences in Long-Covid Syndrome," *Journal of Women's Health* (March 25, 2022), online.
[16] Wallace, J., Goldsmith-Pinkham, P. & Schwartz, JL. "Excess Death Rates for Republicans and Democrats During the COVID-19 Pandemic." NBER WORKING PAPER 30512 (September 2022).

relative to deportation and to the Feb. 2020 federal ruling (enacted right before the pandemic) that blocked green card access for those who utilized food stamps and some health and housing assistance. Though that rule is no longer in effect, some may remain hesitant to seek aid, even in illness.

Race/Ethnicity and Age

Age outcomes also vary by race/ethnicity. In some measure a result of frontline employment, **relatively large numbers of young people were included in the Hispanic and Black death tolls, both pre- and post-vax, whereas that has not been the case among Whites and Asians**. Those able to work at home were not as likely to be infected.

Where **37.8% of Hispanic and 30.7% of Black male deaths have been to men 59 and under**, this has been true for only **17.7% of White and 13.9% of Asian** male deaths. Likewise, where **28% of Hispanic and 27.2% of Black female deaths** have been to women 59 and under, this has been true for only **12.5% of White and 13% of Asian female deaths**. These data indicate that younger people should take the same precautions as their elders. In addition to fatalities, avoiding infection will also mean avoiding the effects of long Covid on some who have been infected and recovered, of all ages.

Sixty of the 100 confirmed deaths to date among **people between 0 and 29** have occurred **among Hispanics** (3 children under 10, 8 teens, and 49 people in their 20s [41 men, 19 women]); along with **21** deaths to Blacks (1 under 10, 1 teen, and 19 people in their 20s [10 men, 11 women]); **9** deaths to Whites (1 under 10, 2 teens, and 6 people in their 20s [7 men, 2 women]); **5** deaths to Asians (5 people in their 20s [1 man, 4 women]); and **5** people in their 20s Race Other/Unknown [2 men, 3 women]. The 301 deaths reported among **people in their 30s** here to date break down as: 166 Hispanic, 73 Black, 34 White, 8 Asian, 20 Unknown Race; of them, 200 were male and 101 female.

Figures 5 documents fatalities over time, by gender and race/ethnicity (end-of-line plateaus will rise as data lags catch up). Rising lines indicate continuing fatalities and indicate the need for further progress in vaccination across groups.

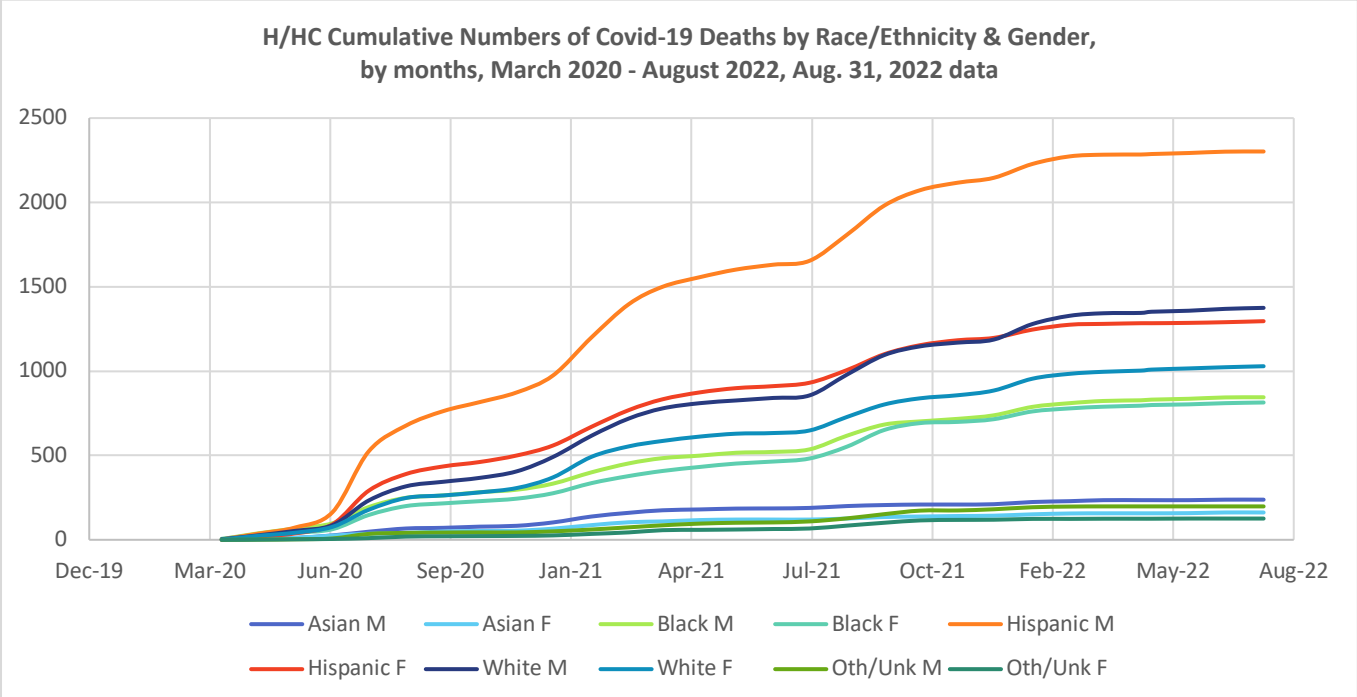

Figure 5 Mortality Data per HHD & HCPH, as of August 31, 2022.

AGE ANALYSES

Old age also significantly intersects Covid19 deaths**.** The majority of Covid19 deaths globally occur among people over seventy, and that is the case here as well (deaths to people over 70 made up 4,245 out of the total 8,402- confirmed Covid19 deaths here - 51.7%). Overall, the old, those with underlying conditions, frontline workers and the poor/socially vulnerable, or those with some combination of those factors, have proven most at risk. However, as noted above, the numbers of deaths here among people in their 40s, 50s and 60s are significant, and vary by race/ ethnicity. Figure 6 breaks out the deaths by age group, and gender.

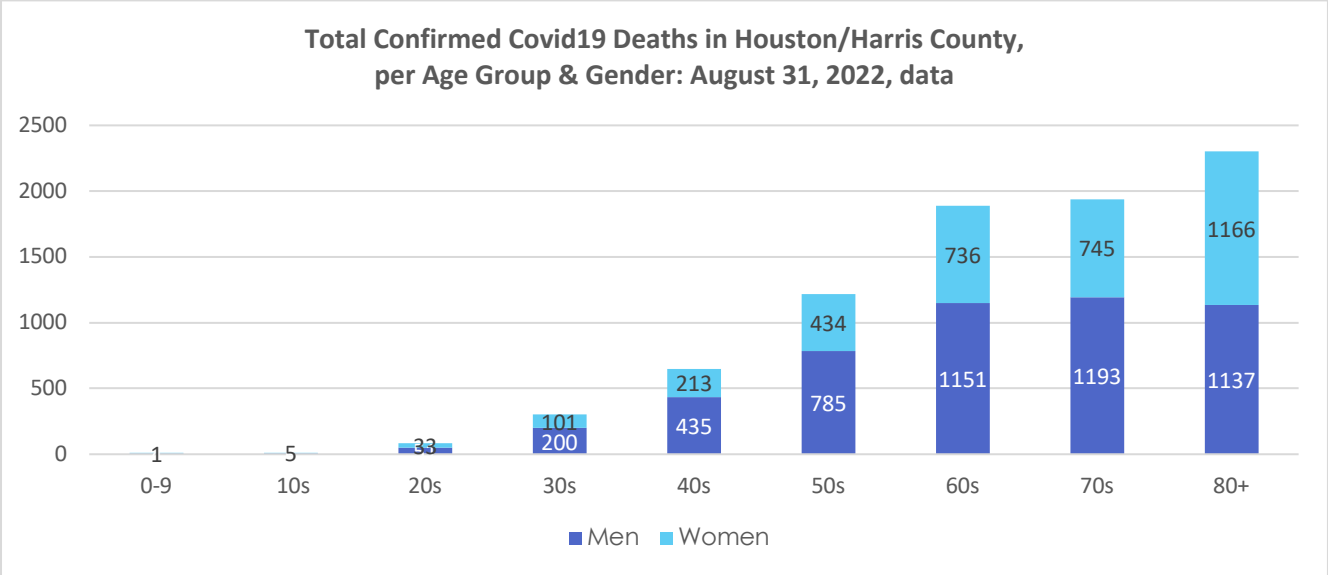

Figure 6 Mortality Data per HHD & HCPH, as of August 31, 2022.

Overall, Covid19 has diminished the community of elders across the United States – and even more so in the Hispanic and Black communities, which already had low survival rates into their later decades due to lower health care access, etc. This cuts connections to history, life wisdom and knowledge, and family bonds. **Harris County has lost at least 2.97% of its men of all race/ethnicities in their 80s and above to Covid19 and 1.84% of its women in that age band.** That includes 4.75% of Hispanic men, 3.63% of black men, 2.25% of white men and 1.97% of Asian men in their 80s; 2.62% of Hispanic women, 1.92% of black women, 1.58% of Asian women, and 1.53% of white women in their 80s. Along with their individual families, the nation is much the poorer for these losses.

While women have died in lower numbers than men in all age bands between 20s and 70s, the relation reverses in the 80+ band (1166 women / 1137 men), in large part because **men represent only 37.6% of the population of people 80 and over in Harris County.** Given that roughly twice as many women as men survive into their 80s and beyond (due to men's overall worse health outcomes), older women's Covid19 fatalities have occurred at much lower rate than those 80+ compared to men (see Figure 8). The same resiliency that allows women to live longer in general plays in with resisting Covid19.

This evidence draws attention to the pre-existent inequities in health by gender and **suggests the need for a men's health outreach campaign across race/ethnicities,** as well as studies of the gendered inequities in our culture that negatively affect men's health, including gendered stereotypes and disparities of opportunity.

Figures 7 and 8 break out the deaths by age group, gender and race/ethnicity.

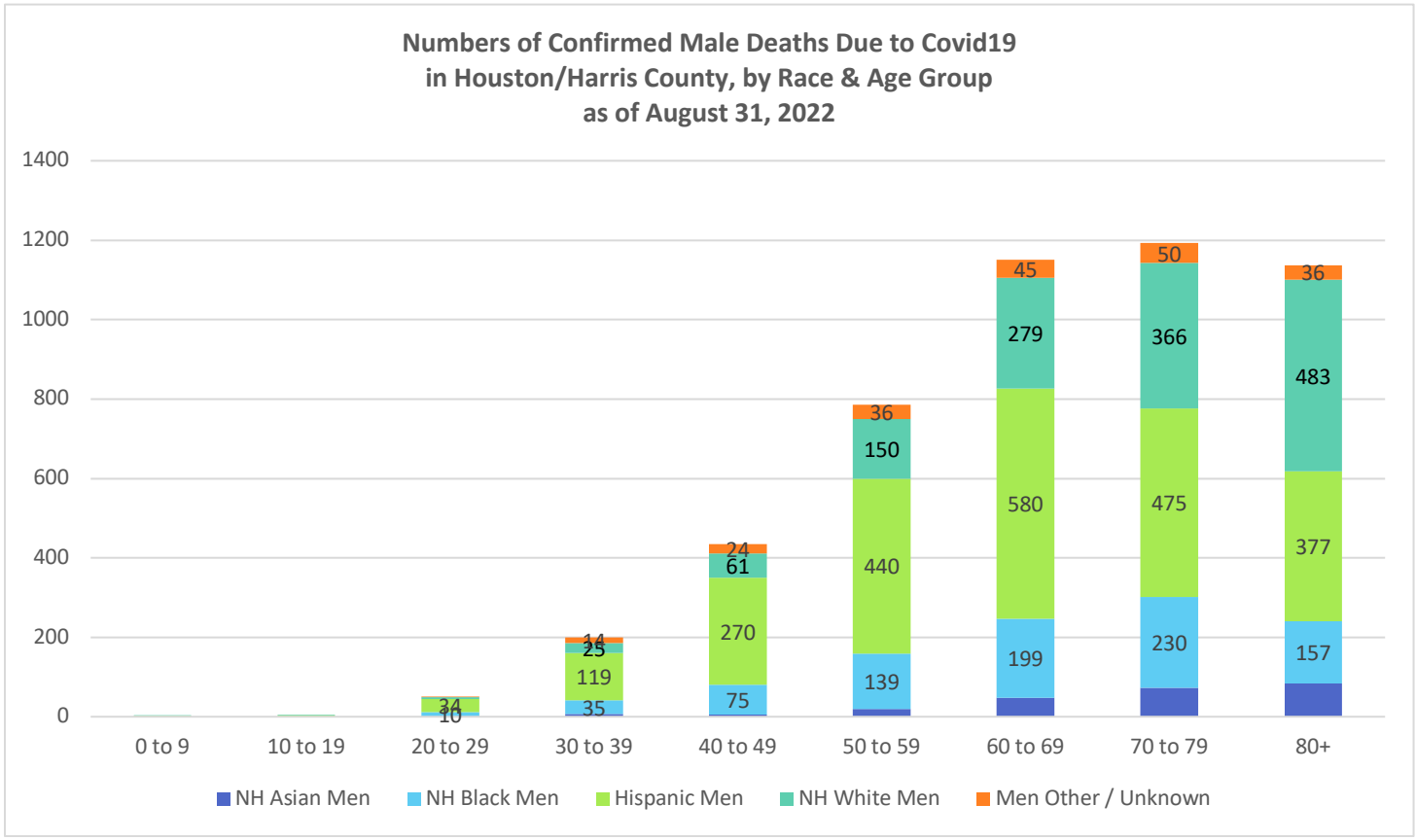

Figure 7 Mortality Data per HHD & HCPH, as of August 31, 2022.

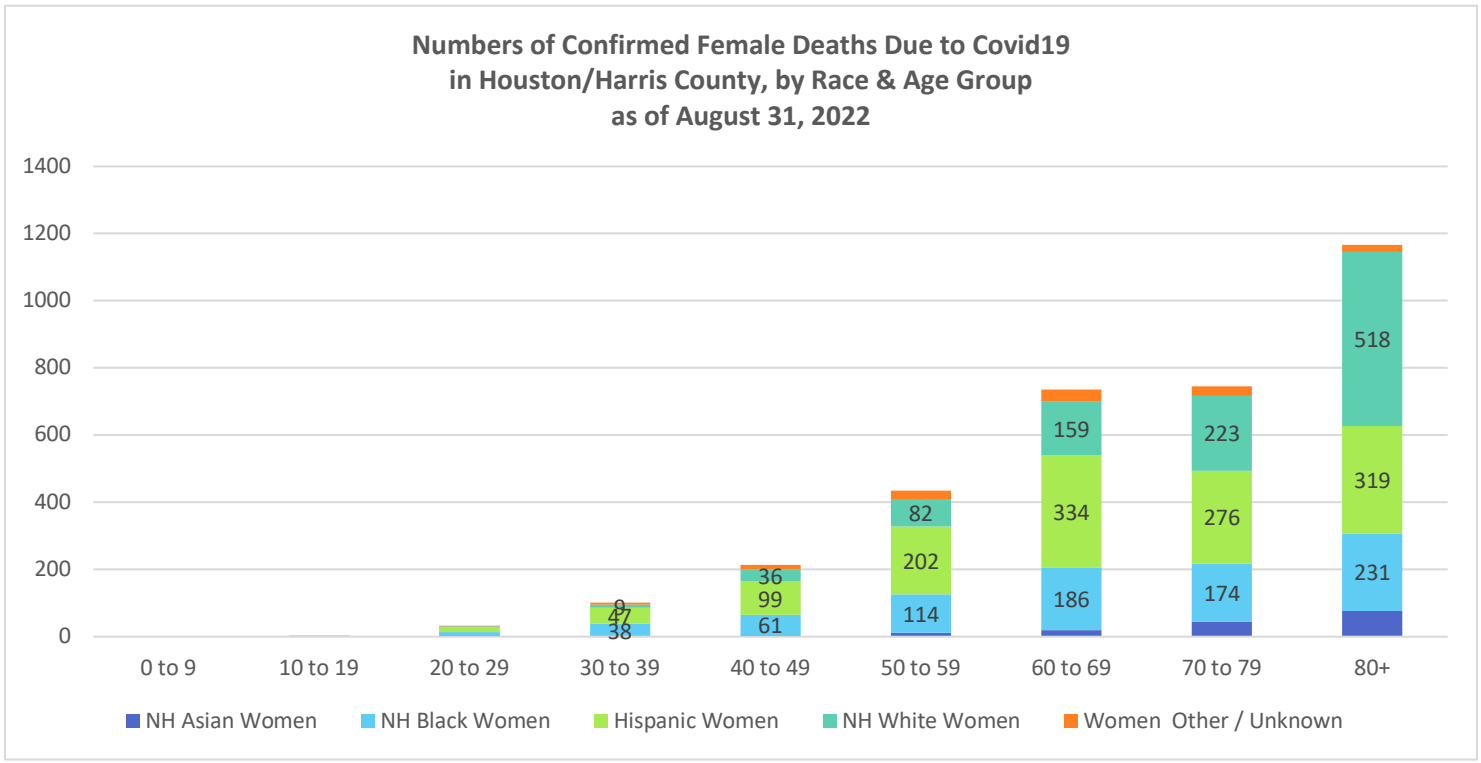

Figure 8 Mortality Data per HHD & HCPH, as of August 31, 2022.

While Covid19 has highlighted pre-existent disparities in American society and demonstrated some predictable socio-economic patterns, it has affected and continues to affect all groups negatively. It also seems to behave in distinctive ways as a disease, around factors like gender, age, and post-infection immunity. We are watching an evolving disease, with evolving effects on various sectors.

EXCESS DEATHS (Unreported COVID19 Deaths)
The number of reported Covid19 deaths cannot reflect total local deaths to that illness, because some go **undiagnosed**. In the initial phases of the pandemic, few people were being tested and therefore quite a few who had the virus were not identified as Covid19 deaths. A study in *JAMA* presented the numbers of "excess deaths" due to respiratory ailments in March-May 2020 compared to a running average of the past five years for that period in each state.[17] **They found that in Texas 55% of such excess deaths were not attributed to Covid19 in March-May though most of them were caused by it, meaning that more than double the number of reported Covid19 deaths at the time were likely.** The percentage missed has changed as testing has increased, but some misses remain predictable.

The undercount of infections and deaths and the actual rate of deaths also increase when people who wish to avoid challenge on their immigration status or have no health insurance (Texas has the highest uninsured rate at 16.7% [national average is 8.9%][18]) are slow to seek aid. In addition, deaths due to other causes may be linked to Covid19 if people refrain from getting treatment for fear of the virus.

ADDITIONAL PANDEMIC GENDER EFFECTS – Homeschooling, Domestic Violence, etc.
As noted in previous Snapshots, the lower level of Covid19 deaths among women contrasts to a number of **other gender differentials around the virus**, both national and local. These include:
• **Women's higher rates of workplace exposure in some frontline jobs** (in Harris County, women make up 74% of health workers, 59% of fast food workers, 73% of pharmacists, and 69% of cashiers), which connects to **women's lower levels of pay** (see UH IRWGS Report on H/HC Gender & Sexuality Data, May 2021);
• **Women's expanded responsibilities for childcare & homeschooling** with school shutdowns (see below);
• **Higher levels of domestic violence**—global reports document a rise due to increased numbers locked in with their abusers, greater economic stress, children at home 24/7, and fear of **Covid (HPD reported 38 DV homicides in 2019, 54 in 2020 and 81 in 2022);**
• **Reduction of access to birth control and abortion** in Texas due to the 2020 cut in access to birth control and abortion, the 2021 shut down of all access to abortion here after 6-weeks gestation, and the complete abortion ban after the Dobbs decision in June 2022, will also affect women's long-term status.

Researchers on workplace equity predict that women overall and single mothers in particular[19] will see long-**term career setbacks if they had to step away from jobs due to their greater responsibility for childcare and homeschooling** due to pandemic school closures.[20] The Build Back Better Act proposed expanding access to childcare and preschool for all families, but it did not pass in 2021. Future **Universal Childcare legislation and a reup of the Child Tax Credit could be transformative for women workers and their families.[21]**

On the Covid-affected health and economic fronts documented in this Snapshot, both equity and stability demand thoughtful innovation and transformative action by local and national business and civic leaders.

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[17] Weinberger et al. Estimation of Excess Deaths Associated with the COVID19 Pandemic in the US, March to May 2020. *JAMA Intern Med.* Published online July 1, 2020.
[18] US Census Bureau, *Health Insurance Coverage in the US: 2018*. Released Nov. 8, 2019.
[19] Single mothers made up 28.9% of women living with children under 18 in Harris County in 2019 (ACS).
[20] Patricia Cohen and Tiffany Hsu, "Pandemic Could Scar a Generation of Working Mothers," *New York Times,* (June 3, 2020). See also Misty Heggeness & Palak Suri, "Telework, Childcare and Mothers' Labor Supply," Federal Reserve Bank of Minneapolis (11/16/21)
[21] See Gregory, "Jobs for Men but Not for Women," and "With Dobbs, Women Are No Longer Full Citizens," *The Nation* (December 2021; June 2022).